

**STATE OF MICHIGAN
IN THE CIRCUIT COURT FOR THE COUNTY OF ANTRIM**

WILLIAM BAILEY

Plaintiff

Case No. 20-9238-CZ

v.

ANTRIM COUNTY

HON. KEVIN A. ELSENHEIMER

Defendant

SECRETARY OF STATE JOCELYN
BENSON

Intervenor-Defendant,

Matthew S. DePerno (P52622)
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EXHIBITS 4

**PLAINTIFF'S MOTION AND BRIEF FOR RECONSIDERATION OR,
ALTERNATIVELY, REHEARING PURSUANT TO MCR 2.119(F)**

Respectfully submitted

DePERNO LAW OFFICE, PLLC

Dated: June 9, 2021

/s/ Matthew S. DePerno

Matthew S. DePerno (P52622)

Attorney for Plaintiff

Subject: Centralized Subversion of Election Vote Totals and Paper Tapes
Analyst: Jeffrey Lenberg
Date: 6/9/2021

Executive Summary

The Dominion Voting Systems Election Management System (EMS) and ImageCast Precinct (ICP) are susceptible to subversion by a modification of the election project files located in a repository at ElectionSource. ElectionSource technicians were responsible for provisioning the election project files for the November 3, 2020 general election in Antrim County along with at least twenty-two (22) other counties in Michigan according to the log files on the Antrim County Election Management System. The subversion can be accomplished through the modification of a single file for each tabulator contained in the ElectionSource repository of election project files. This subversion results in the manipulation of the votes recorded both in the county's results files on the compact flash (CF) cards and on the paper tapes printed by the ICP tabulators in each precinct. This subversion is undetectable using the routine canvassing process because the ICP paper tape matches the vote total reports from the EMS that are read from the CF cards.

The ElectionSource technicians responsible for provisioning and updating the election project files for Antrim County created the election project files on their corporate computing infrastructure (laptops, servers, cloud accounts, etc). The updated election project files deployed by the ElectionSource technicians were simply installed into Antrim County's election systems. It is likely that a complete repository exists at ElectionSource that contains all the election project files for the entire list of Michigan counties supported by ElectionSource.

The subversion of the EMS and ICP is accomplished by modifying a single file contained in the ElectionSource repository, and then having that specific file along with the rest of the election project files transferred onto the compact flash cards either at ElectionSource or the county running the election. Once the compact flash cards are provisioned containing the subversion, no additional modifications need to be made on the EMS or ICPs to modify the vote totals.

The ability to modify a single file in the ElectionSource repository used by their field technicians reveals a major attack vector for fraud to manipulate votes not just in Antrim County, but across all counties in Michigan where ElectionSource provides contractor support to the election process. To be clear, all of the counties in Michigan where ElectionSource provides pre-configured election project files are vulnerable to this attack and the resulting subversion of the vote totals at the EMS and paper tapes from the ICP tabulator would match precisely despite the vote totals being manipulated in a fraudulent fashion.

Details

The Dominion Election Management System (EMS) and the ImageCast Precinct (ICP) are susceptible to subversion through the modification of a single file per tabulator. This single file is part of a package of files that are deployed on the compact flash cards that are used in each ICP tabulator in each individual precinct.

The name of the file is “VIF_CHOICE_INSTANCE.DVD” and it is contained in the directory for the specific precinct ICP it is meant to be deployed to. See an example in Figure 1 of the directory structure for the files stored on the compact flash cards. Note: the compact flash card contents are encrypted by default, however, Dominion or ElectionSource would have the tools and keys to decrypt, modify, and re-encrypt these election project files.

▶ AntrimNovember2020ElectionFiles > ElectionFiles > Helena Township, Precinct 1 ICP

Name	Date modified	Type	Size
dcf	4/29/2021 12:43 AM	File folder	
election	4/29/2021 12:43 AM	File folder	
resources	4/29/2021 12:44 AM	File folder	
TabulatorData.xml	10/23/2020 4:39 PM	XML Document	1 KB
TabulatorManifest.xml	10/23/2020 4:39 PM	XML Document	1 KB

Figure 1 - Election Project File Directory Structure for Compact Flash Cards

AntrimNovember2020ElectionFiles > ElectionFiles > Helena Township, Precinct 1 ICP > election

Name	Date modified	Type	Size
VIF.DVD	10/23/2020 4:39 PM	DVD File	1 KB
VIF_AUDIO.DVD	10/23/2020 4:39 PM	DVD File	1 KB
VIF_BALLOT_GROUP.DVD	10/23/2020 4:39 PM	DVD File	1 KB
VIF_BALLOT_INSTANCE.DVD	10/23/2020 4:39 PM	DVD File	3 KB
VIF_BALLOT_LAYOUT.DVD	10/23/2020 4:39 PM	DVD File	1 KB
VIF_CHOICE.DVD	10/23/2020 4:39 PM	DVD File	5 KB
VIF_CHOICE_INSTANCE - Copy.DVD	10/23/2020 4:39 PM	DVD File	6 KB
VIF_CHOICE_INSTANCE.DVD	10/23/2020 4:39 PM	DVD File	6 KB
VIF_CONTEST.DVD	10/23/2020 4:39 PM	DVD File	5 KB
VIF_CONTEST_INSTANCE.DVD	10/23/2020 4:39 PM	DVD File	1 KB
VIF_ELECTION.DVD	10/23/2020 4:39 PM	DVD File	1 KB
VIF_ELECTORAL_GROUP.DVD	10/23/2020 4:39 PM	DVD File	1 KB
VIF_GLOBAL_LAYOUT.DVD	10/23/2020 4:39 PM	DVD File	1 KB
VIF_LANGUAGE.DVD	10/23/2020 4:39 PM	DVD File	1 KB
VIF_PARTY.DVD	10/23/2020 4:39 PM	DVD File	1 KB
VIF_POLL.DVD	10/23/2020 4:39 PM	DVD File	1 KB
VIF_PRECINCT.DVD	10/23/2020 4:39 PM	DVD File	1 KB

Figure 2 - Election Project DVD Files (Encrypted)

In addition, the encryption algorithm used to protect the data on the compact flash cards is AES-128 which is known to be easily broken via ciphertext only attack. Moreover, the AES-128 keys for the election project files are stored on the EMS itself within the database (see Logan expert report 4/9/2021).

The VIF_CHOICE_INSTANCE.DVD file is a binary file that contains the instructions on how the tabulator will process ballots, how vote totals are assigned to each candidate, and ultimately how the paper tapes and results files are generated. Simply editing the VIF_CHOICE_INSTANCE.DVD file and modifying the mapping of the bullets on the ballots (vote selections) to the candidates allows for manipulation of the vote results.

Figure 3 and Figure 4 are the output of a purpose-built forensics analysis program that decrypts and decodes the data in the compact flash results file and associates it with the controlling record in the VIF_CHOICE_INSTANCE.DVD configuration file. The highlighted area in Figure 4 shows the manipulation of the raw binary data that creates the modification of both the paper tapes and the results file.

```
Contest 689: 7 choices
  Over Votes: 0 | Under Votes: 0 | Cross Votes: 0 | Double Votes: 0
  Choice | Marks | Config Index | Data
  Biden 3016 | 2 | 225 | b'00000bc300000000006001300004f1a0000a54800000000000100000008'
  Trump 3017 | 4 | 256 | b'00000bc900000000006001500004f1a0000b35800000000000200000021'
  Jorgensen 3018 | 1 | 287 | b'00000bca00000000006001700004f1a0000c16800000000000300000079'
  Blankenship 3019 | 0 | 318 | b'00000bc500000000006001900004f1a0000cf780000000000040000003c'
  Hawkings 3020 | 0 | 349 | b'00000bcc00000000006001b00004f1a0000dd8800000000000500000095'
  De La Fuente 3021 | 0 | 380 | b'00000bcd00000000006001d00004f1a0000eb98000000000006000000ab'
```

Figure 3 - Run of 7 Ballots with No Manipulation

```
Contest 689: 7 choices
  Over Votes: 0 | Under Votes: 0 | Cross Votes: 0 | Double Votes: 0
  Choice | Marks | Config Index | Data
  Biden 3016 | 4 | 256 | b'00000bc800000000006001500004f1a0000b35800000000000200000021'
  Trump 3017 | 2 | 225 | b'00000bc900000000006001300004f1a0000a54800000000000100000008'
  Jorgensen 3018 | 1 | 287 | b'00000bca00000000006001700004f1a0000c16800000000000300000079'
  Blankenship 3019 | 0 | 318 | b'00000bc500000000006001900004f1a0000cf780000000000040000003c'
  Hawkings 3020 | 0 | 349 | b'00000bcc00000000006001b00004f1a0000dd8800000000000500000095'
  De La Fuente 3021 | 0 | 380 | b'00000bcd00000000006001d00004f1a0000eb98000000000006000000ab'
```

Figure 4 - Run of 7 Ballots with Manipulation

The output from this subversion results in the ICP tabulator creating fraudulent paper tapes that do not match the votes processed on the paper ballots along with results files written to the compact flash card that reflect the same manipulated vote totals. The results files on the compact flash cards are also fraudulent and will be processed normally by the EMS showing the same fraudulent vote totals matching the paper tape. This subversion is undetectable in the current canvassing

process, as the paper tapes and vote totals reported on the EMS will precisely match despite the fact they have been fraudulently manipulated.

Simulated Election Validating Central Subversion

In order to validate the central subversion, a simulated election was run with the ballots listed in Appendix A. The breakdown of the Presidential contest votes on the ballots are:

- 2 for Biden
- 4 for Trump
- 1 for Jorgenson

Note that the same ballots were run twice in the same sequence, thus a total of 14 ballots were run in all.

Using the subversion in Figure 4 the following election results were generated.

President and Vice President of the United States (1)	
Joseph R. Biden / Kamala D. Harris (Democrat):	8
Donald J. Trump / Michael R. Pence (Republican):	4
Jo Jorgensen / Jeremy Cohen (Libertarian):	2
Don Blankenship / William Mohr (U.S. Taxpayers):	0
Howie Hawkins / Angela Walker (Green):	0
Rocky De La Fuente / Darcy Richardson (Natural Law):	0
Write-in:	0
Total Votes:	14

06/04/2021 15:08

United States Senator for State (1)

Figure 5 - The Tabulator Paper Tape Showing Modified Totals

Contest: **President and Vice President of the United States**
 Number Of Postions : **1**
 Precinct Portion:
 Ballot Manifestation : **0**

Ballot Statistics

Contest Results

Overvotes:
 Undervotes:
 Blank:
 Double Votes:
 Invalid Votes:
 Writein Overrides:

Candidate Results

Name	Party	Votes
Joseph R. Biden / Kamala D. Harris	DEM	8
Donald J. Trump / Michael R. Pence	REP	4
Jo Jorgensen / Jeremy Cohen	LIB	2
Don Blankenship / William Mohr	UST	0
Howie Hawkins / Angela Walker	GRN	0
Rocky De La Fuente / Darcy Richardson	NLP	0
Write-in		0

Figure 6 - EMS Vote Total Modified

It is crucial to realize that no access to the EMS is required for an attacker to modify the election outcomes in any precinct for any tabulator. There is no need to modify the EMS database locally in any manner for this subversion to effectively modify both the paper tape and EMS results. This subversion does defeat the canvassing process that relies on discrepancies in the paper tape and EMS electronic totals to be found by human inspection. Only the original ballots would show the true votes during a one-hundred percent paper ballot audit process.

In addition, the access needed for an attacker to utilize this subversion would be confined to Election Source and their central repository of election files used for provisioning elections across the State of Michigan. The subversion could be used by

a malicious insider or a remote cyber attacker to modify election results across the State of Michigan with impunity.

Other Subversion Outcomes

There are other variants of this same subversion that include the modification of the “VIF_BALLLOT_INSTANCE.DVD” file, the table below describes the possible outcomes when modifying the VIF_CHOICE_INSTANCE.DVD file and/or the VIF_BALLLOT_INSTANCE.DVD file.

Note: Ballots are ground truth.		05/22/21		
VIF_CHOICE_INSTANCE	VIF_BALLLOT_INSTANCE		PAPER TAPE	RESULTS FILE
Modified	Unmodified		Modified	Modified
Unmodified	Modified		Modified	Unmodified
Modified	Modified		Unmodified	Modified

Figure 7 - Variants of Subversions

The combination of modifications to VIF_CHOICE_INSTANCE and VIF_BALLLOT_INSTANCE allow for an attacker to choose a variation where either paper tape or the results file are modified alone, see Figure 7. While this report focuses on modifying both the paper tape and results file to match the manipulated vote totals, it is conceivable that an attacker may wish to employ a variant to provide plausible deniability that the subversion was a “technical glitch” versus a fraudulent activity.

Provisioning the Compact Flash Cards in Antrim County

The UserLog table indicates there were very few compact flash cards provisioned using the EMS for Antrim County. In fact, the only compact flash card provisioning activities noted in the log files were for Central Lake Township, Precinct 1, by Election Source on September 25th, and Mancelona Township Precinct 1 and 2 by Antrim County on October 23rd. In addition, Antrim County provisioned Central Lake Township Precinct on November 5th, see Figure 8.

executedCommand	operationTimestamp
CF card for tabulator Central Lake Township, Precinct 1 ICP has been programmed.	2020-09-25 10:20:39.517
Backup CF card for tabulator Central Lake Township, Precinct 1 ICP has been initialized.	2020-09-25 10:21:07.440
CF card for tabulator Central Lake Township, Precinct 1 ICP has been programmed.	2020-09-25 10:24:36.527
Backup CF card for tabulator Central Lake Township, Precinct 1 ICP has been initialized.	2020-09-25 10:24:59.477
CF card for tabulator Mancelona Township, Precinct 1 ICP has been programmed.	2020-10-23 16:46:25.477
Backup CF card for tabulator Mancelona Township, Precinct 1 ICP has been initialized.	2020-10-23 16:46:42.297
CF card for tabulator Mancelona Township, Precinct 2 ICP has been programmed.	2020-10-23 16:47:21.703
Backup CF card for tabulator Mancelona Township, Precinct 2 ICP has been initialized.	2020-10-23 16:47:36.250
CF card for tabulator Central Lake Township, Precinct 1 ICP has been programmed.	2020-11-05 10:22:29.563
Backup CF card for tabulator Central Lake Township, Precinct 1 ICP has been initialized.	2020-11-05 10:22:46.097

Figure 8 - UserLog Table Showing Compact Flash Card Provisioning

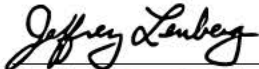
Only a small number of ImageCast-X (ICX) Ballot Marking Device Smart Cards were found to have been provisioned in the UserLog table on the Antrim County EMS including Custer Township Tabulator 20, Banks Township Tabulator 17, Chestonia Township Tabulator 19 by ElectionSource, see Figure 9. Mancelona Township Tabulator 27 was provisioned by Antrim County. All other smart cards have no log evidence of how or who provisioned them.

executedCommand	operationTimestamp
Smart Card for user Admin has been programmed for tabulator 20.Custer Township, Precinct 1 ICX.	2020-09-22 16:03:32.160
Smart Card for user Admin has been programmed for tabulator 17.Banks Township, Prec nct 1 ICX.	2020-09-23 13:58:38.893
Smart Card for user Admin has been programmed for tabulator 17.Banks Township, Prec nct 1 ICX.	2020-09-23 14:00:19.220
Smart Card for user Admin has been programmed for tabulator 19.Chestonia Township, Prec nct 1 ICX.	2020-09-23 14:47:09.553
Smart Card for user Admin has been programmed for tabulator 27.Mancelona Township, Prec ncts 1, 2 ICX.	2020-10-23 17:00:46.280

Figure 9 - UserLog Table Excerpt Showing ICX Smart Cards Provisioning

The conclusion regarding the provisioning of the compact flash/smart cards for Antrim County is that only a limited number are recorded in the user log. The remaining compact flash/smart cards could have been provisioned via ElectionSource using their own computing infrastructure as there is no evidence that function was performed using the Antrim County EMS.

Under the penalties of perjury, I declare that I have read the foregoing report and that facts stated in it are true.



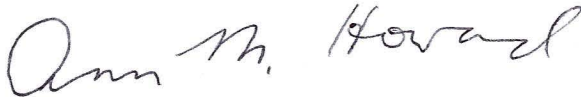
 Jeffrey Lenberg

MICHIGAN NOTARY ACKNOWLEDGEMENT

State of Michigan
County of Oakland

The foregoing instrument was acknowledged before me on this 9th day of June, 2021 by Jeffrey Lenberg.

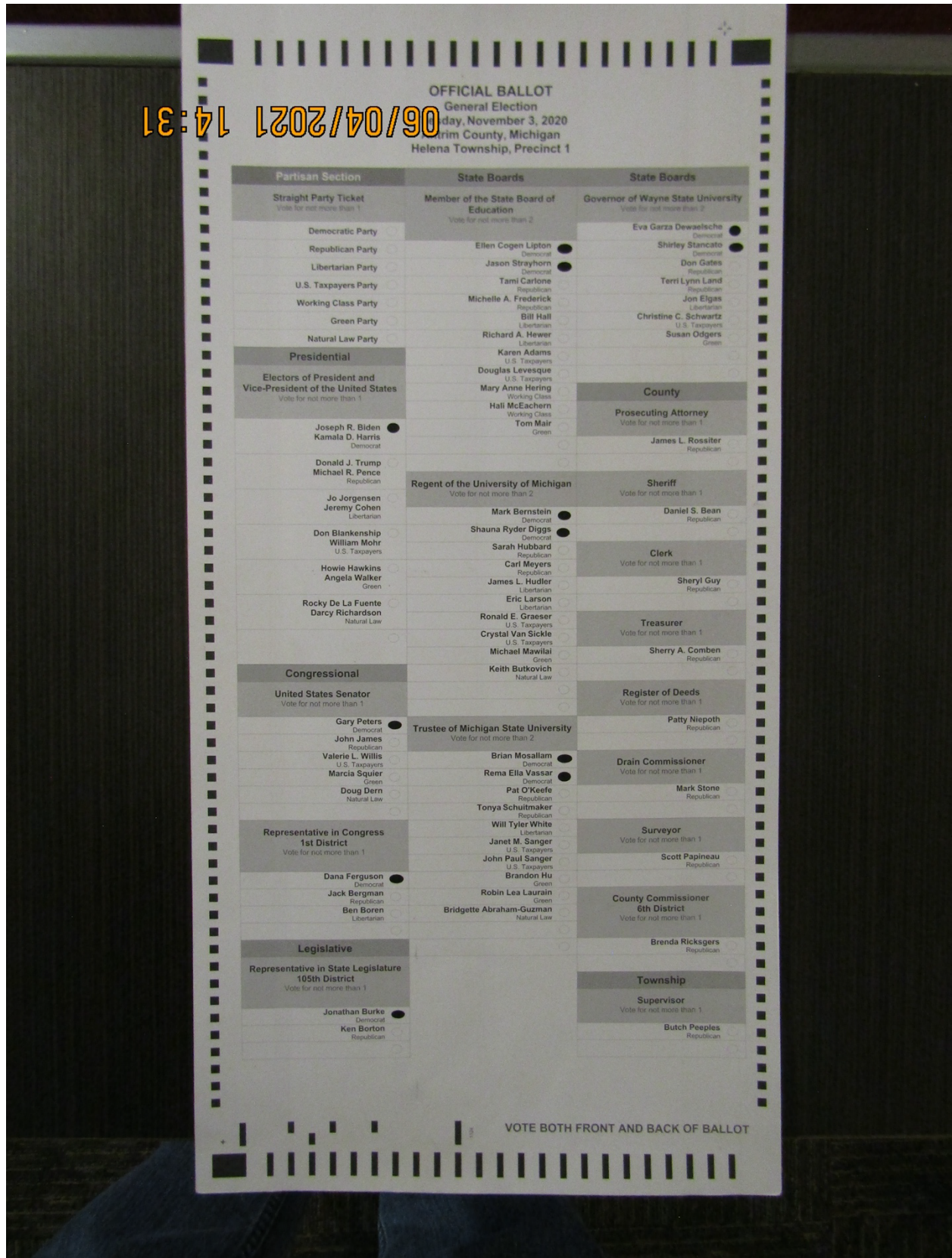
Notary Public Signature:

A handwritten signature in cursive script that reads "Ann M. Howard". The signature is written in dark ink and is positioned below the "Notary Public Signature:" label.

Notary Printed Name: Ann M. Howard
Acting in the County of: Oakland
My Commission Expires: 2/24/2023

Appendix A
Ballots used for this test.

13:41 06/04/2021

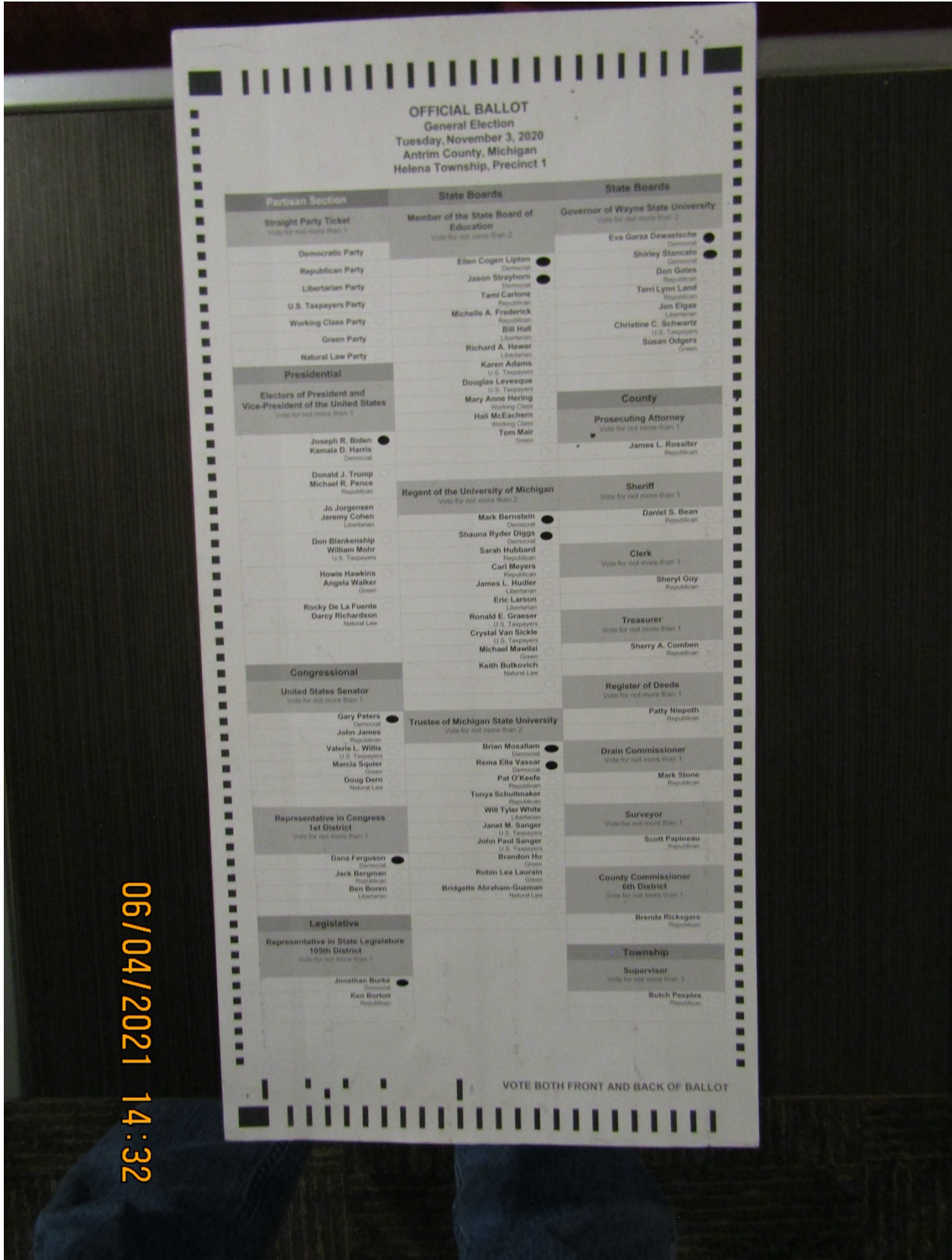


OFFICIAL BALLOT
General Election
Friday, November 3, 2020
Helina County, Michigan
Helina Township, Precinct 1

Partisan Section	State Boards	State Boards
Straight Party Ticket Vote for not more than 1	Member of the State Board of Education Vote for not more than 2	Governor of Wayne State University Vote for not more than 2
Democratic Party <input type="radio"/>	Ellen Cogen Lipton <input checked="" type="radio"/>	Eva Garza Dewaeleche <input checked="" type="radio"/>
Republican Party <input type="radio"/>	Jason Stryhorn <input checked="" type="radio"/>	Shirley Stancato <input checked="" type="radio"/>
Libertarian Party <input type="radio"/>	Tami Carlone <input type="radio"/>	Don Gates <input type="radio"/>
U.S. Taxpayers Party <input type="radio"/>	Michelle A. Frederick <input type="radio"/>	Terri Lynn Land <input type="radio"/>
Working Class Party <input type="radio"/>	Bill Hall <input type="radio"/>	Jon Eligas <input type="radio"/>
Green Party <input type="radio"/>	Richard A. Hauer <input type="radio"/>	Christine C. Schwartz <input type="radio"/>
Natural Law Party <input type="radio"/>	Karen Adams <input type="radio"/>	Susan Odgers <input type="radio"/>
Presidential	Regent of the University of Michigan Vote for not more than 2	County
Electors of President and Vice-President of the United States Vote for not more than 1	Douglas Levesque <input type="radio"/>	Prosecuting Attorney Vote for not more than 1
Joseph R. Biden <input checked="" type="radio"/>	Mary Anne Hering <input type="radio"/>	James L. Rossiter <input type="radio"/>
Kamala D. Harris <input type="radio"/>	Hali McEachern <input type="radio"/>	
Donald J. Trump <input type="radio"/>	Tom Mair <input type="radio"/>	Sheriff Vote for not more than 1
Michael R. Pence <input type="radio"/>		Daniel S. Bean <input type="radio"/>
Jo Jorgensen <input type="radio"/>	Mark Bernstein <input checked="" type="radio"/>	
Jeremy Cohen <input type="radio"/>	Shauna Ryder Diggs <input checked="" type="radio"/>	Clerk Vote for not more than 1
Don Blankenship <input type="radio"/>	Sarah Hubbard <input type="radio"/>	Sheryl Guy <input type="radio"/>
William Mohr <input type="radio"/>	Carl Meyers <input type="radio"/>	
Howie Hawkins <input type="radio"/>	James L. Hudler <input type="radio"/>	Treasurer Vote for not more than 1
Angela Walker <input type="radio"/>	Eric Larson <input type="radio"/>	Sherry A. Comben <input type="radio"/>
Rocky De La Fuente <input type="radio"/>	Ronald E. Grasser <input type="radio"/>	
Darcy Richardson <input type="radio"/>	Crystal Van Sickle <input type="radio"/>	Register of Deeds Vote for not more than 1
	Michael Mawilal <input type="radio"/>	Patty Niepoth <input type="radio"/>
	Keith Butkovich <input type="radio"/>	
Congressional	Trustee of Michigan State University Vote for not more than 2	Drain Commissioner Vote for not more than 1
United States Senator Vote for not more than 1	Brian Mosallam <input checked="" type="radio"/>	Mark Stone <input type="radio"/>
Gary Peters <input checked="" type="radio"/>	Rema Ella Vassar <input checked="" type="radio"/>	
John James <input type="radio"/>	Pat O'Keefe <input type="radio"/>	Surveyor Vote for not more than 1
Valerie L. Willis <input type="radio"/>	Tonya Schuitmaker <input type="radio"/>	Scott Papineau <input type="radio"/>
Marcia Squier <input type="radio"/>	Will Tyler White <input type="radio"/>	
Doug Dern <input type="radio"/>	Janet M. Sanger <input type="radio"/>	County Commissioner 6th District Vote for not more than 1
	John Paul Sanger <input type="radio"/>	Brenda Ricksgers <input type="radio"/>
	Brandon Hu <input type="radio"/>	
Representative in Congress 1st District Vote for not more than 1	Robin Lea Laurain <input type="radio"/>	Township
Dana Ferguson <input checked="" type="radio"/>	Bridgette Abraham-Guzman <input type="radio"/>	Supervisor Vote for not more than 1
Jack Bergman <input type="radio"/>		Butch Peoples <input type="radio"/>
Ben Boren <input type="radio"/>		
Legislative		
Representative in State Legislature 105th District Vote for not more than 1		
Jonathan Burke <input checked="" type="radio"/>		
Ken Borton <input type="radio"/>		

VOTE BOTH FRONT AND BACK OF BALLOT

Appendix A
Ballots used for this test.



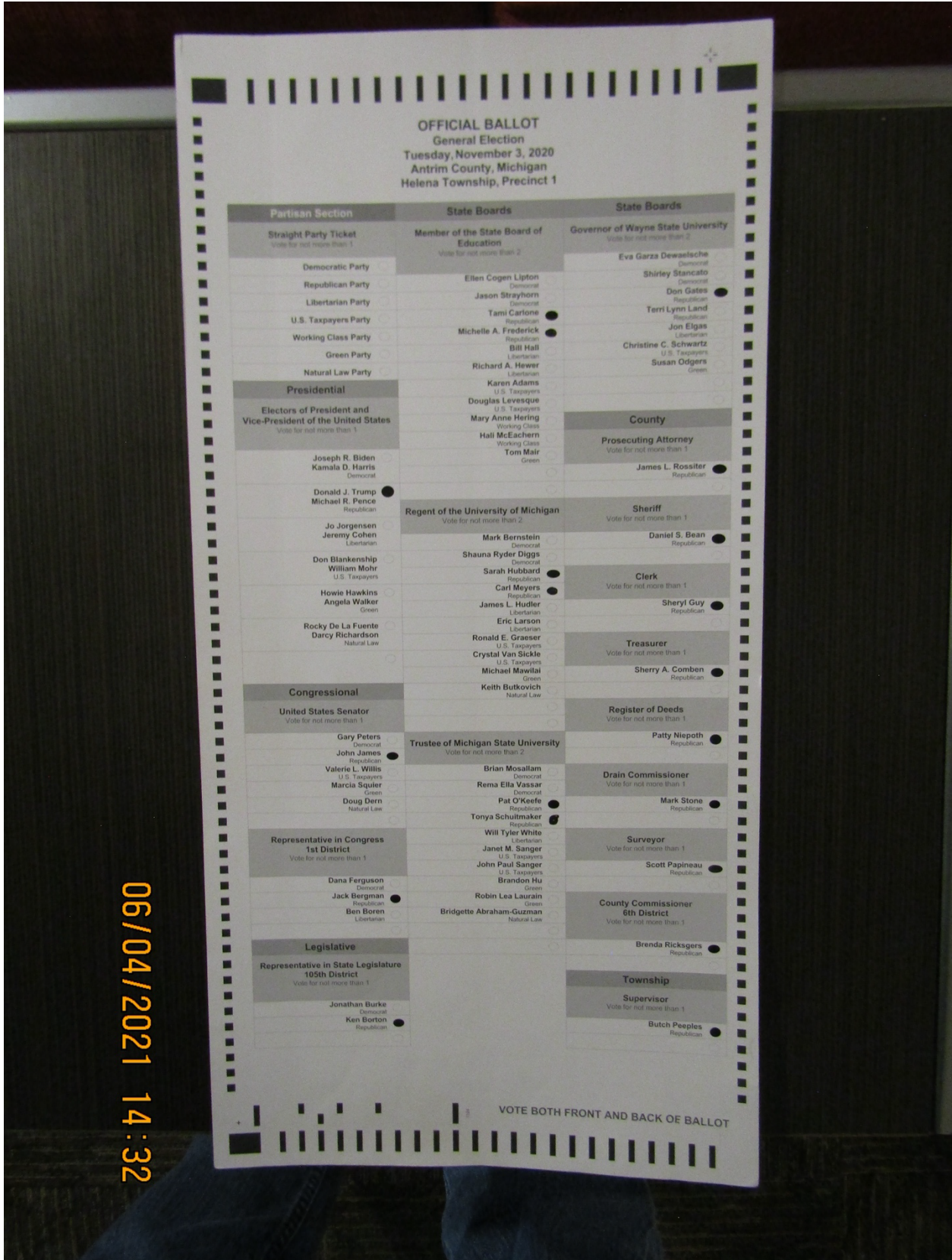
06/04/2021 14:32

OFFICIAL BALLOT
General Election
Tuesday, November 3, 2020
Antrim County, Michigan
Helena Township, Precinct 1

Partisan Section	State Boards	State Boards
Straight Party Ticket Vote for not more than 1	Member of the State Board of Education Vote for not more than 2	Governor of Wayne State University Vote for not more than 2
Democratic Party	Ellen Cogen Lipton	Eva Garza Dewaeleche
Republican Party	Jason Strayhorn	Shirley Stancato
Libertarian Party	Tami Carlone	Don Gates
U.S. Taxpayers Party	Michelle A. Frederick	Terri Lynn Land
Working Class Party	Richard A. Hower	Jon Elgas
Green Party	Karen Adams	Christine C. Schwartz
Natural Law Party	Douglas Levesque	Susan Odgers
Presidential	Regent of the University of Michigan Vote for not more than 2	County
Electors of President and Vice-President of the United States Vote for not more than 1	Mark Bernstein	Prosecuting Attorney Vote for not more than 1
Joseph R. Biden	Shauna Ryder Diggs	James L. Rossiter
Kamala D. Harris	Sarah Hubbard	Sheriff Vote for not more than 1
Donald J. Trump	Carl Meyers	Daniel S. Bean
Michael R. Pence	James L. Hudler	Clerk Vote for not more than 1
Jo Jorgensen	Eric Larson	Sheryl Guy
Jeremy Cohen	Ronald E. Graesser	Treasurer Vote for not more than 1
Don Blankenship	Crystal Van Sickle	Sherry A. Comben
William Mohr	Michael Mawilai	Register of Deeds Vote for not more than 1
Howie Hawkins	Keith Butkovich	Patty Nispoth
Angela Walker	Trustee of Michigan State University Vote for not more than 2	Drain Commissioner Vote for not more than 1
Rocky De La Fuente	Brian Mosalam	Mark Stone
Darcy Richardson	Rema Elita Vaasar	Surveyor Vote for not more than 1
Congressional	Pat O'Keefe	Scott Papineau
United States Senator Vote for not more than 1	Tonya Schultmaker	County Commissioner 6th District Vote for not more than 1
Gary Peters	Will Tyler White	Brenda Rickagers
John James	Janet M. Sanger	Township
Valerie L. Willis	John Paul Sanger	Supervisor Vote for not more than 1
Marcia Spuler	Brandon Hu	Butch Peoples
Doug Dern	Robin Lea Laurain	
Representative in Congress 1st District Vote for not more than 1	Bridgette Abraham-Guzman	
Dana Ferguson		
Jack Bergman		
Ben Boren		
Legislative		
Representative in State Legislature 105th District Vote for not more than 1		
Jonathan Burke		
Ken Borlon		

VOTE BOTH FRONT AND BACK OF BALLOT

Appendix A
Ballots used for this test.



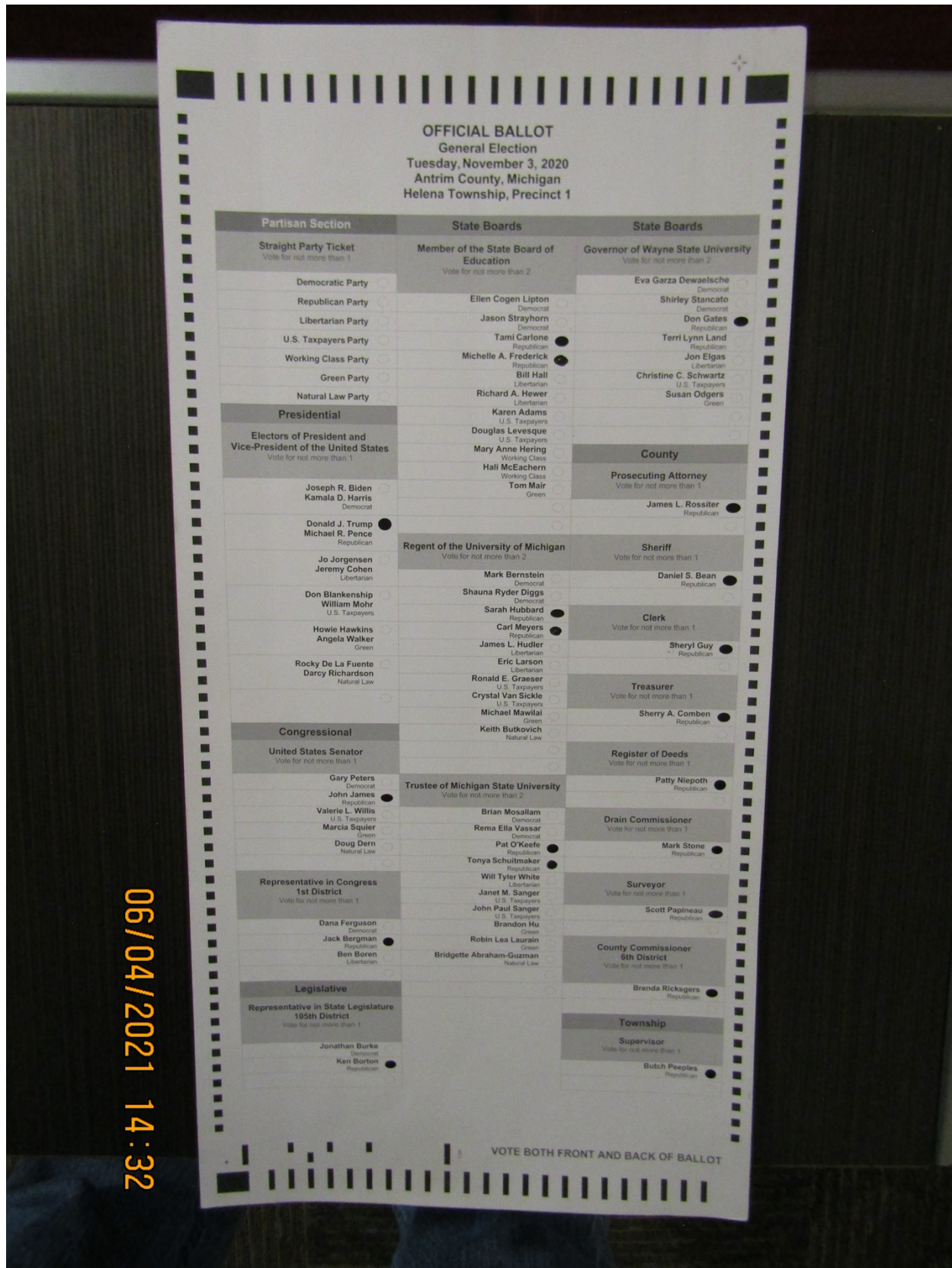
06/04/2021 14:32

OFFICIAL BALLOT
General Election
Tuesday, November 3, 2020
Antrim County, Michigan
Helena Township, Precinct 1

Partisan Section	State Boards	State Boards
Straight Party Ticket Vote for not more than 1	Member of the State Board of Education Vote for not more than 2	Governor of Wayne State University Vote for not more than 2
Democratic Party	Elten Cogen Lipton Democrat	Eva Garza Dewalscha Democrat
Republican Party	Jason Strayhorn Democrat	Shirley Stancato Democrat
Libertarian Party	Tami Carlone Republican	Don Gates Republican
U.S. Taxpayers Party	Michelle A. Frederick Republican	Terri Lynn Land Republican
Working Class Party	Bill Hall Libertarian	Jon Elgas Libertarian
Green Party	Richard A. Hewer Libertarian	Christine C. Schwartz U.S. Taxpayers
Natural Law Party	Karen Adams U.S. Taxpayers	Susan Odgers Green
Presidential	Regent of the University of Michigan Vote for not more than 2	County
Electors of President and Vice-President of the United States Vote for not more than 1	Douglas Levesque U.S. Taxpayers	Prosecuting Attorney Vote for not more than 1
Joseph R. Biden Kamala D. Harris Democrat	Mary Anne Hering Working Class	James L. Rossiter Republican
Donald J. Trump Michael R. Pence Republican	Hali McEachern Working Class	Sheriff Vote for not more than 1
Jo Jorgensen Jeremy Cohen Libertarian	Tom Mair Green	Daniel S. Bean Republican
Don Blankenship William Mohr U.S. Taxpayers	Mark Bernstein Democrat	Clerk Vote for not more than 1
Howie Hawkins Angela Walker Green	Shauna Ryder Diggs Democrat	Sheryl Guy Republican
Rocky De La Fuente Darcy Richardson Natural Law	Sarah Hubbard Republican	Treasurer Vote for not more than 1
Congressional	Carl Meyers Republican	Sherry A. Comben Republican
United States Senator Vote for not more than 1	James L. Hudler Libertarian	Register of Deeds Vote for not more than 1
Gary Peters Democrat	Eric Larson Libertarian	Patty Niepoth Republican
John James Republican	Ronald E. Graeser U.S. Taxpayers	Drain Commissioner Vote for not more than 1
Valerie L. Willis U.S. Taxpayers	Crystal Van Sickle U.S. Taxpayers	Mark Stone Republican
Marcia Squier Green	Michael Mawlal Green	Surveyor Vote for not more than 1
Doug Dern Natural Law	Keith Butkovich Natural Law	Scott Papineau Republican
Representative in Congress 1st District Vote for not more than 1	Trustee of Michigan State University Vote for not more than 2	County Commissioner 6th District Vote for not more than 1
Dana Ferguson Democrat	Brian Mosallam Democrat	Brenda Ricksgrs Republican
Jack Bergman Republican	Rema Ella Vassar Democrat	Township
Ben Boren Libertarian	Pat O'Keefe Republican	Supervisor Vote for not more than 1
Legislative	Tonya Schultmaker Republican	Butch Peebles Republican
Representative in State Legislature 105th District Vote for not more than 1	Will Tyler White Libertarian	
Jonathan Burke Democrat	Janet M. Sanger U.S. Taxpayers	
Ken Borton Republican	John Paul Sanger U.S. Taxpayers	
	Brandon Hu Green	
	Robin Lea Laurain Green	
	Bridgette Abraham-Guzman Natural Law	

VOTE BOTH FRONT AND BACK OF BALLOT

Appendix A
Ballots used for this test.



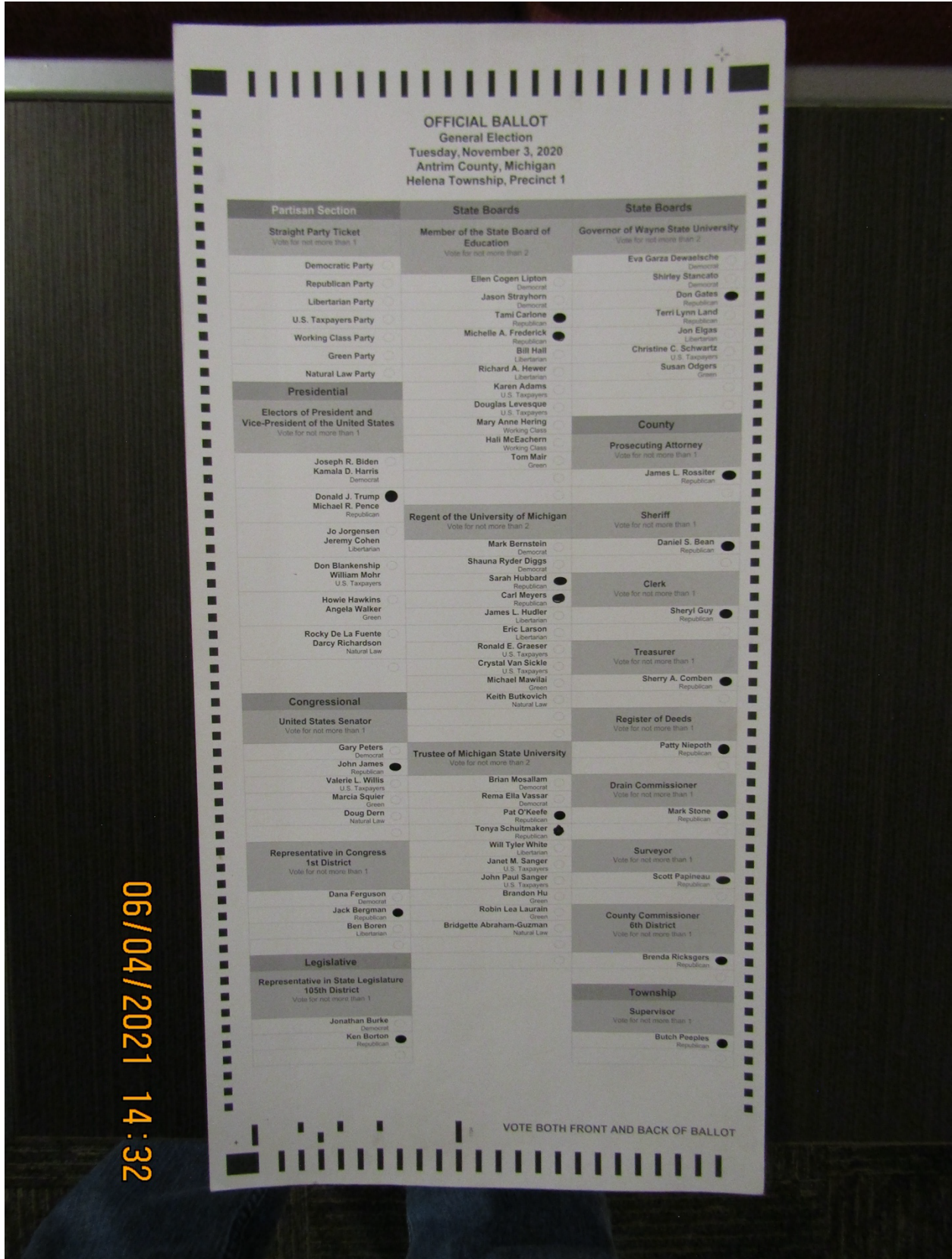
OFFICIAL BALLOT
General Election
Tuesday, November 3, 2020
Antrim County, Michigan
Helena Township, Precinct 1

Partisan Section	State Boards	State Boards
Straight Party Ticket Vote for not more than 1	Member of the State Board of Education Vote for not more than 2	Governor of Wayne State University Vote for not more than 2
Democratic Party <input type="radio"/>	Ellen Cogen Lipton Democrat	Eva Garza Dewaelsche Democrat
Republican Party <input type="radio"/>	Jason Strayhorn Democrat	Shirley Stancato Democrat
Libertarian Party <input type="radio"/>	Tami Carlone Republican	Don Gates Republican
U.S. Taxpayers Party <input type="radio"/>	Michelle A. Frederick Republican	Terri Lynn Land Republican
Working Class Party <input type="radio"/>	Bill Hall Libertarian	Jon Elgas Libertarian
Green Party <input type="radio"/>	Richard A. Hewer Libertarian	Christine C. Schwartz U.S. Taxpayers
Natural Law Party <input type="radio"/>	Karen Adams U.S. Taxpayers	Susan Odgers Green
Presidential	Regent of the University of Michigan Vote for not more than 2	County
Electors of President and Vice-President of the United States Vote for not more than 1	Douglas Levesque U.S. Taxpayers	Prosecuting Attorney Vote for not more than 1
Joseph R. Biden Kamala D. Harris Democrat	Mary Anne Hering Working Class	James L. Rossiter Republican
Donald J. Trump Michael R. Pence Republican	Hali McEachern Working Class	Sheriff Vote for not more than 1
Jo Jorgensen Jeremy Cohen Libertarian	Tom Mair Green	Daniel S. Bean Republican
Don Blankenship William Mohr U.S. Taxpayers	Mark Bernstein Democrat	Clerk Vote for not more than 1
Howie Hawkins Angela Walker Green	Shauna Ryder Diggs Democrat	Sheryl Guy Republican
Rocky De La Fuente Darcy Richardson Natural Law	Sarah Hubbard Republican	Treasurer Vote for not more than 1
	Carl Meyers Republican	Sherry A. Comben Republican
	James L. Hudler Libertarian	Register of Deeds Vote for not more than 1
Congressional	Eric Larson Libertarian	Patty Niepoth Republican
United States Senator Vote for not more than 1	Ronald E. Graeser U.S. Taxpayers	Drain Commissioner Vote for not more than 1
Gary Peters Democrat	Crystal Van Sickle U.S. Taxpayers	Mark Stone Republican
John James Republican	Michael Mawilai Green	Surveyor Vote for not more than 1
Valerie L. Willis U.S. Taxpayers	Keith Butkovich Natural Law	Scott Papineau Republican
Marcia Squier Green	Trustee of Michigan State University Vote for not more than 2	County Commissioner 6th District Vote for not more than 1
Doug Dern Natural Law	Brian Mosallam Democrat	Brenda Rickagers Republican
	Rema Ella Vaasar Democrat	Township
Representative in Congress 1st District Vote for not more than 1	Pat O'Keefe Republican	Supervisor Vote for not more than 1
Dana Ferguson Democrat	Tonya Schultmaker Republican	Butch Peoples Republican
Jack Bergman Republican	Will Tyler White Libertarian	
Ben Boren Libertarian	Janet M. Sanger U.S. Taxpayers	
	John Paul Sanger U.S. Taxpayers	
	Brandon Hu Green	
	Robin Lea Laurain Green	
	Bridgette Abraham-Guzman Natural Law	
Legislative		
Representative in State Legislature 185th District Vote for not more than 1		
Jonathan Burke Democrat		
Ken Barton Republican		

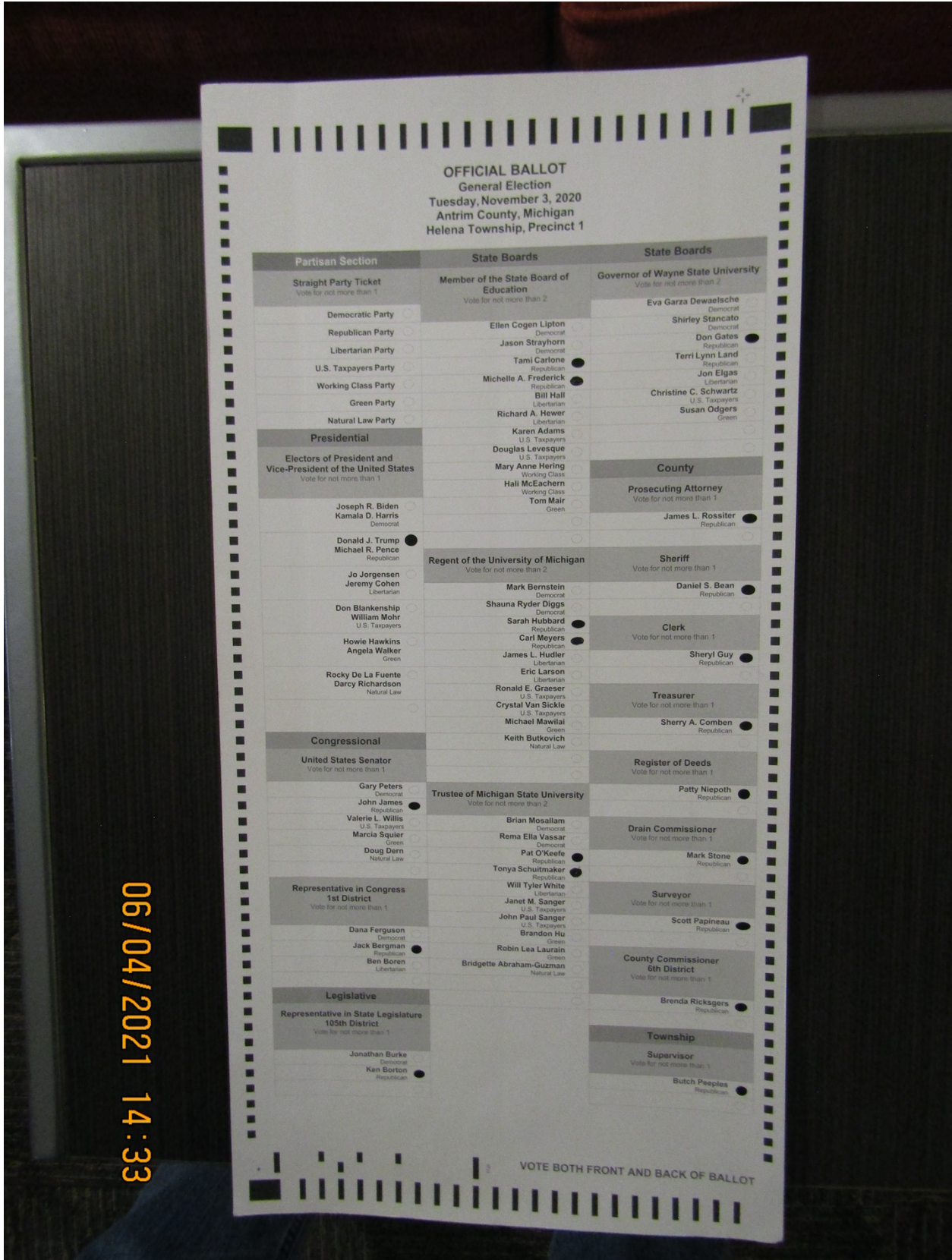
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VOTE BOTH FRONT AND BACK OF BALLOT

Appendix A
Ballots used for this test.



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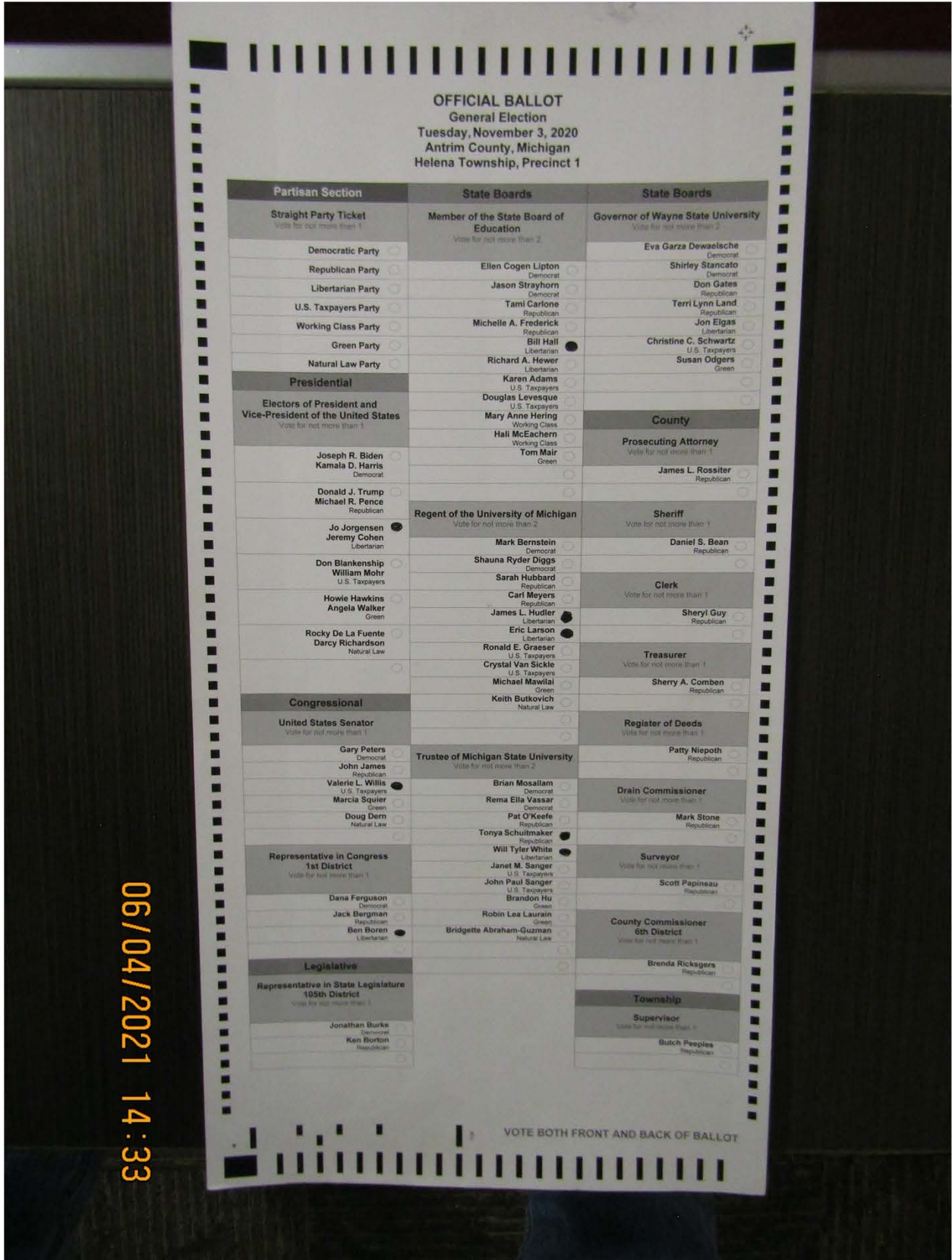
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OFFICIAL BALLOT
General Election
Tuesday, November 3, 2020
Antrim County, Michigan
Helena Township, Precinct 1

Partisan Section	State Boards	State Boards
Straight Party Ticket Vote for not more than 1	Member of the State Board of Education Vote for not more than 2	Governor of Wayne State University Vote for not more than 2
Democratic Party	Ellen Cogen Lipton Democrat	Eva Garza Dewaeleche Democrat
Republican Party	Jason Strayhorn Democrat	Shirley Stancato Democrat
Libertarian Party	Tami Carlone Democrat	Don Gates Republican
U.S. Taxpayers Party	Michelle A. Frederick Republican	Terri Lynn Land Republican
Working Class Party	Bill Hall Libertarian	Jon Elgas Libertarian
Green Party	Richard A. Hewer Libertarian	Christine C. Schwartz U.S. Taxpayers
Natural Law Party	Karen Adams U.S. Taxpayers	Susan Odgers Green
Presidential	Regent of the University of Michigan Vote for not more than 2	County
Electors of President and Vice-President of the United States Vote for not more than 1	Douglas Levesque U.S. Taxpayers	Prosecuting Attorney Vote for not more than 1
Joseph R. Biden	Mary Anne Hering Working Class	James L. Rossiter Republican
Kamala D. Harris	Hali McCachern Working Class	
Donald J. Trump	Tom Mair Green	Sheriff Vote for not more than 1
Michael R. Pence		Daniel S. Bean Republican
Jo Jorgensen	Trustee of Michigan State University Vote for not more than 2	Clerk Vote for not more than 1
Jeremy Cohen	Mark Bernstein Democrat	Sheryl Guy Republican
Don Blankenship	Shauna Ryder Diggs Democrat	Treasurer Vote for not more than 1
William Mohr U.S. Taxpayers	Sarah Hubbard Republican	Sherry A. Comben Republican
Howie Hawkins	Carl Meyers Republican	Register of Deeds Vote for not more than 1
Angela Walker Green	James L. Hudler Libertarian	Patty Niepoth Republican
Rocky De La Fuente	Eric Larson Libertarian	Drain Commissioner Vote for not more than 1
Darcy Richardson Natural Law	Ronald E. Graeser U.S. Taxpayers	Mark Stone Republican
Congressional	Crystal Van Sickle U.S. Taxpayers	Surveyor Vote for not more than 1
United States Senator Vote for not more than 1	Michael Mawilal Green	Scott Papineau Republican
Gary Peters Democrat	Keith Butkovich Natural Law	County Commissioner 6th District Vote for not more than 1
John James Republican	Trustee of Michigan State University Vote for not more than 2	Brenda Ricks Republican
Valerie L. Willis U.S. Taxpayers	Brian Mosallam Democrat	Township
Marcia Squier Green	Rema Ella Vassar Democrat	Supervisor Vote for not more than 1
Doug Dern Natural Law	Pat O'Keefe Republican	Butch Peoples Republican
Representative in Congress 1st District Vote for not more than 1	Tonya Schuitmaker Republican	
Dana Ferguson Democrat	Will Tyler White Libertarian	
Jack Bergman Republican	Janet M. Sanger U.S. Taxpayers	
Ben Boren Libertarian	John Paul Sanger U.S. Taxpayers	
Legislative	Brandon Hu Green	
Representative in State Legislature 105th District Vote for not more than 1	Robin Lea Laurain Green	
Jonathan Burke Democrat	Bridgette Abraham-Guzman Natural Law	
Ken Borton Republican		

VOTE BOTH FRONT AND BACK OF BALLOT

Appendix A
Ballots used for this test.



OFFICIAL BALLOT
General Election
Tuesday, November 3, 2020
Antrim County, Michigan
Helena Township, Precinct 1

Partisan Section	State Boards	State Boards
Straight Party Ticket Vote for not more than 1	Member of the State Board of Education Vote for not more than 2	Governor of Wayne State University Vote for not more than 2
Democratic Party	Ellen Cogen Lipton Democrat	Eva Garza Dewaelche Democrat
Republican Party	Jason Strayhorn Democrat	Shirley Stancato Democrat
Libertarian Party	Tami Carlone Republican	Don Gates Republican
U.S. Taxpayers Party	Michelle A. Frederick Republican	Terri Lynn Land Republican
Working Class Party	Bill Hall Libertarian	Jon Elgas Libertarian
Green Party	Richard A. Hewer Libertarian	Christine C. Schwartz U.S. Taxpayers
Natural Law Party	Karen Adams U.S. Taxpayers	Susan Odgers Green
Presidential	Douglas Levesque U.S. Taxpayers	
Electors of President and Vice-President of the United States Vote for not more than 1	Mary Anne Hering Working Class	County
Joseph R. Biden Kamala D. Harris Democrat	Hali McEachern Working Class	Prosecuting Attorney Vote for not more than 1
Donald J. Trump Michael R. Pence Republican	Tom Mair Green	James L. Rossiter Republican
Jo Jorgensen Jeremy Cohen Libertarian	Regent of the University of Michigan Vote for not more than 2	Sheriff Vote for not more than 1
Don Blankenship William Mohr U.S. Taxpayers	Mark Bernstein Democrat	Daniel S. Bean Republican
Howie Hawkins Angela Walker Green	Shauna Ryder Diggs Democrat	Clerk Vote for not more than 1
Rocky De La Fuente Darcy Richardson Natural Law	Sarah Hubbard Republican	Sheryl Guy Republican
	Carl Meyers Republican	Treasurer Vote for not more than 1
	James L. Hudler Libertarian	Sherry A. Comben Republican
	Eric Larson Libertarian	Register of Deeds Vote for not more than 1
	Ronald E. Graeser U.S. Taxpayers	Patty Niepoth Republican
	Crystal Van Sickle U.S. Taxpayers	Drain Commissioner Vote for not more than 1
	Michael Mawiai Green	Mark Stone Republican
	Keith Butkovich Natural Law	Surveyor Vote for not more than 1
Congressional		Scott Papineau Republican
United States Senator Vote for not more than 1	Trustee of Michigan State University Vote for not more than 2	County Commissioner 6th District Vote for not more than 1
Gary Peters Democrat	Brian Mosallam Democrat	Brenda Ricksgrs Republican
John James Republican	Rema Ella Vassar Democrat	Township
Valerie L. Willis U.S. Taxpayers	Pat O'Keefe Republican	Supervisor Vote for not more than 1
Marcia Squier Green	Tonya Schuitmaker Republican	Butch Peoples Republican
Doug Dern Natural Law	Willi Tyler White Libertarian	
Representative in Congress 1st District Vote for not more than 1	Janet M. Sanger U.S. Taxpayers	
Dana Ferguson Democrat	John Paul Sanger U.S. Taxpayers	
Jack Bergman Republican	Brandon Hu Green	
Ben Boren Libertarian	Robin Lea Laurain Green	
	Bridgette Abraham-Guzman Natural Law	
Legislative		
Representative in State Legislature 109th District Vote for not more than 1		
Jonathan Burke Democrat		
Ken Borton Republican		

06/04/2021 14:33

VOTE BOTH FRONT AND BACK OF BALLOT